

ABSTRACT OF THE DISCLOSURE

An internal voltage generating circuit is provided. The internal voltage generating circuit of a semiconductor device includes a control signal generating circuit for generating a control signal according to a number of data bits, a 5 comparator for comparing a reference voltage to an internal voltage to generate a driving signal when the control signal is inactivated, a driving signal control circuit for inactivating the driving signal when the control signal is activated, and an internal voltage driving circuit for receiving an external power voltage and generating the internal voltage in response to the driving signal. Therefore, an 10 internal voltage can be turned to a reference voltage level or to an external power voltage level according to the number of data input and/or output bits of a semiconductor device, and even when the number of data input and/or output bits is increased, a data access speed can be improved.